

Title	THE CREATION OF COAL
Level	Middle/High School
Subject	Earth Science / Environmental Science.
Duration	30-35 minutes
Objective	The students will be able to simulate conditions that create coal.
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➤ **MATERIAL**

A clear, square, large-size container, (*plastic or glass*) fine sand, rocks, pebbles, small stones, plant leaves, ferns, twigs, grass, screen, fine silt, water, and clay.

➤ **ACTIVITY**

1. Place 2 inches of clay at the bottom of the glass container.
2. Put 5-6 inches of water in it.
3. Smooth out 2-3 inches of fine sand on the bottom of the container.
4. Put in leaves pebbles, rocks, stones, ferns, sticks, etc. Let the formation stand and settle for one week.
* *Have student's record observations of changes in the formation.*
5. After two weeks students will record observations of changes again. Tell students to observe changes such as decomposition, color change, odor.
6. Wait another week, have students sift 2-3 more inches of sand into the container.
7. Have student's record observations. "coal formation" should be visible.
8. Take out the water and let the layers dry for a week. Have students observe and record their findings.

➤ **DISCUSSION**

1. Have students discuss and share their findings with each other.
2. Ask them what did they notice about the final product?
3. How did it look, smell?
4. Discuss with them observable "fossil imprints."
5. Students should have an understanding that pressure and heat causes decomposed substances to form coal.